

Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1. (Currently Amended) An immortalized human undifferentiated cardiomyocyte cell line, wherein the cell line comprises a replicable vector that expresses SV-40 large T antigen, and wherein the cell line is produced by a method comprising the step of fusing a post-mitotic primary non-immortalized human cardiomyocyte obtained from adult human heart tissue with a human fibroblast, the fibroblast
 - (a) having been treated with ethidium bromide;
 - (b) comprising a replicable vector expressing SV40 large T antigen which confers immortality on a cell comprising same; and
 - (c) being free of mitochondrial DNA.
2. (Cancelled)
3. (Currently Amended) An immortalized human undifferentiated cardiomyocyte cell line, The ~~cell line of claim 1,~~ wherein the cardiomyocyte

cell line is designated AC16 (ATCC Designation No. PTA-1500).

4. (Currently Amended) An immortalized human undifferentiated cardiomyocyte cell line, ~~The cell line of claim 1,~~ wherein the cardiomyocyte cell line is designated AC10 (ATCC Designation No. PTA-1501).

5. (Currently Amended) An immortalized human undifferentiated cardiomyocyte cell line, ~~The cell line of claim 1,~~ wherein the cardiomyocyte cell line is designated RL14 (ATCC Designation No. PTA-1499).

6. (Cancelled)

7. (Cancelled)

8. (Previously Presented) A method for preparing a human undifferentiated immortalized cell line derived from a post-mitotic primary cell culture which comprises:

(a) providing a cell culture of human primary post-mitotic cells;

(b) providing a human fibroblast cell line which

(i) has been transfected with a replicable nucleic acid vector

expressing SV40 large T antigen
which immortalizes the
fibroblast cell line, and

(ii) has been depleted of its
mitochondrial DNA;

(c) co-culturing the human fibroblast
cell line of step (b) with the cell
culture of step (a) under appropriate
conditions so that cell fusion
occurs;

(d) growing the fused cells from step (c)
in a selection medium which selects
for cells with mitochondrial DNA; and

(e) selecting cells from step (d) which

(i) contain a replicable vector that
expresses SV-40 large T antigen,
and

(ii) express one or more genes
specifically expressed by the
primary post-mitotic cell of
step (a),

so as to prepare the human
immortalized cell line.

9. (Original) The method of claim 8, wherein the cell culture of human primary non-proliferating cells in step (a) is a cell culture of primary human cardiac cells, primary human skeletal myoblast cells, human neuronal cells, or primary human osteoblast cells.
10. (Cancelled)
11. (Cancelled)
12. (Original) The method of claim 8, wherein the appropriate conditions for cell fusion in step (c) comprise incubation for about one minute in a 50% PEG solution.
- 13.-19. (Cancelled)